DESIGNS,
Metal Work
Lathes and Elements.

No. 3708 #85 / 67

John W. Baldwin's Design for a Foot Lathe.

Fig. 1

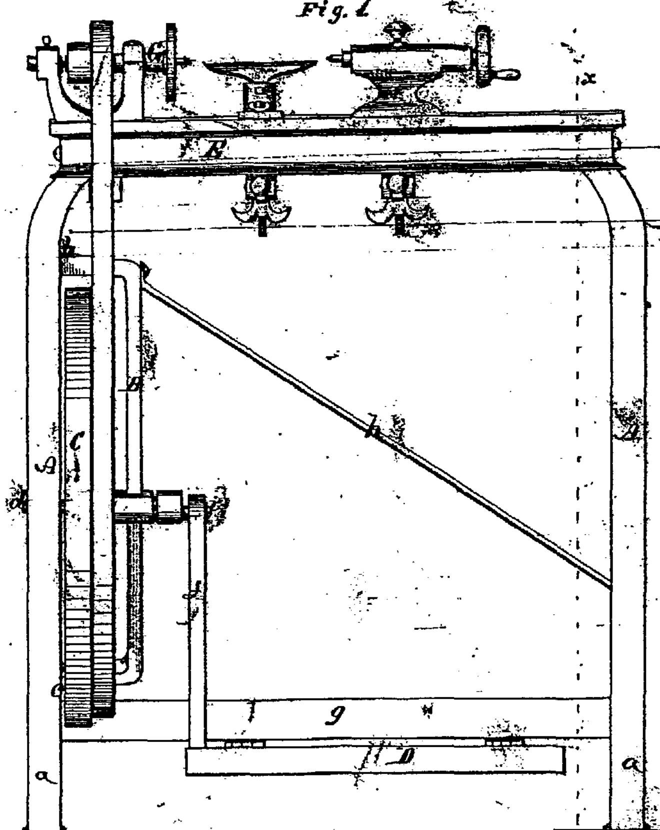
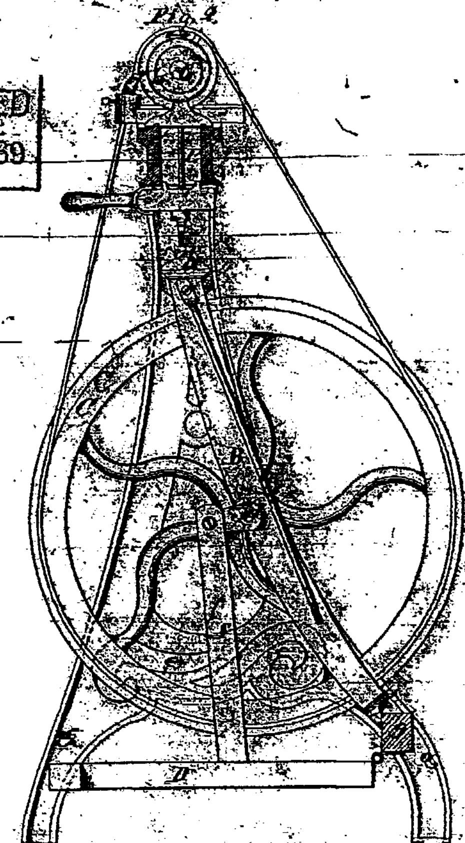


Fig. 2



PATENTED OCT 12 1869

DE [illegible]
Metal Working,
Lathes and Elements.

Witnesses
C. A. Brown

John W. Baldwin

GSA General Services Washington, DC 20408

United States Patent Office.

JOHN W. BALDWIN, OF LACONIA, NEW HAMPSHIRE.

Design No. 3,708, *dated October* 12, 1869.

DESIGN FOR A FOOT-LATHE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN W. BALDWIN, of Laconia, in the county of Belknap, and State of New Hampshire, have invented an improved Design for a Foot-Lathe; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a front elevation of the lathe.

Figure 2, a transverse vertical section thereof, in a plane indicated by the line *x x*, fig. 1

Like letters designate corresponding parts in both figures.

The head-castings, A A, of the frame, have the doubly-curved or ogee-shaped outline, as shown in fig. 2, and between the legs *a a* thereof, double scrolls *e e* are formed, thus making a cross-bar with a light and ornamental appearance.

An arm, B, is secured to the inside of the frame-head A, centrally at *b*, and nearly up to the bed E; and its lower end is attached at *c* to a bar, *g*, connecting the rear legs *a a* of the two frame-heads.

This arm projects away from the frame-head sufficiently to give space between for the balance wheel C; the arm serving as one of the bearings for the shaft *d* of the wheel, and the frame-head furnishing a bearing for the other end thereof.

Thus arranged, the arm obviates the necessity of extending a long shaft from one end of the lathe to the other, thereby saving expense, leaving the space over the treadle free, and being better in all respects.

An oblique brace-rod, *h*, extends from the upper end of the arm to the opposite frame-head A.

The shaft *d*, of the balance-wheel C, and crank *i*, is set back of the central line, vertically under the bed E and head-stock G, as shown in fig. 2.

This arrangement places the balance-wheel back out of the way of the operator, and especially, it brings the connecting-rod *f* further back on the treadle D, and consequently a longer leverage to the treadle is produced; and the several parts of the lathe are thereby brought into such relation to one another, that the operator stands more conveniently to the lathe, and has the work nearer to him.

What I claim as my invention, and desire to secure by Letters Patent, is—

The configuration of the frame-head, the bearing-arm B, supporting a short shaft for the balance-wheel, and the arrangement of the balance-wheel shaft back of the central line, vertically under the bed and head-stock, as herein specified.

This specification signed by me, August 28, 1869.

JOHN W. BALDWIN.

Witnesses:

B. P. GALE,

J. R. CHAMPLIN.